



RELATIONSHIP OF ATTITUDE WITH PUBLIC BEHAVIOR IN WASTE MANAGEMENT

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ABSTRACT

According to Law number 18 of 2008, the definition of waste is the residue of daily human activities or natural processes in solid form. The form, type, and composition of waste are greatly influenced by the cultural level of the community and its natural conditions. The waste problem is closely related to population growth, economic growth and changes in people's consumption patterns. In 2017, Indonesia's population reached 261.89 million people, an increase compared to 2000 which amounted to 206.26 million people. The amount of waste generated every day in Indonesia as a whole reaches 175,000 tons per day or 0.7 kg per person. The purpose of this study was to find out whether there is a relationship between attitudes and people's behavior in waste management at the Mekarwangi Health Center, Bogor City, in 2022. This type of research is descriptive analytic with a cross sectional study design, using Chi-Square test data analysis and carried out at the Mekarwangi Health Center in Bogor City on August 23 - August 25 2022 with a population of 573 families and a sample of 260 families using an accidental sampling technique. It is a survey using a questionnaire regarding attitudes and behavior towards waste management. Knowing the univariate analysis for the waste management attitude variable from 260 respondents who had a negative attitude were 126 people (48.5%) and respondents who had a positive attitude were 134 people (51.5%). For the results of univariate analysis of the waste management behavior variable, 135 respondents (51.9%) had positive behavior and 125 respondents (48.1%) had negative behavior.

Keywords: Attitude, Behavior, Waste Management, Community

INTRODUCTION

Health problems are a very complex problem, which is most related to other problems besides health itself. Likewise, solving public health problems is not only seen from the aspects that have an impact on the problem of 'health-illness' or health. There are four factors that affect health, both individual health and public health, namely the environment, behavior, health services, and heredity or heredity besides having a direct effect on health, they also influence one another. Health status will be achieved optimally, when the four factors together have optimal conditions. One of the factors is in a disturbed state (not optimal), then the health status will be shifted below optimal.(1)

Environmental health is essentially a condition or condition of the environment that is optimal so that it has a positive effect on the realization of optimal health status as well. The scope of environmental health includes housing, disposal of human waste (feces), provision of clean water, garbage disposal, disposal of dirty water (wastewater), housing for livestock (stables), and so on.(1)



In order to achieve a healthy and prosperous society in the future, it is very necessary to have a healthy residential environment. From the aspect of waste, the word healthy will mean a condition that will be achieved if waste can be managed properly so that it is clean from the residential environment where humans are active in it.(1)

According to Law number 18 of 2008, the definition of waste is the residue of daily human activities or natural processes in solid form. (2) Waste is unwanted residual material after the end of a process. (9) Form, type, and composition of waste is greatly influenced by the cultural level of the community and its natural conditions.(10) Developed countries which are very sensitive to environmental health problems generally have their disposal regulated in such a way that almost every type of solid waste has been separated to facilitate its management. As for developing countries, waste is generally still disposed of without any effort to sort it by type first, so that waste containers still accommodate very heterogeneous waste. Various organic, non-organic and metal wastes are still one,

Garbage and waste have become a national problem. The waste problem is closely related to population growth, economic growth and changes in people's consumption patterns. In 2017, Indonesia's population reached 261.89 million people, an increase compared to 2000 which amounted to 206.26 million people. The trend of economic growth has also continued to increase, with the largest contribution coming from the manufacturing sector. The Gross Domestic Product generated from this sector amounted to 2,739.4 trillion in 2017, an increase from 2000 which was only 385.5 trillion. Rapid growth in the industrial sector is also the result of rising household incomes and increasing diversity of patterns and types of public consumption. This condition causes an increase in volume, various types, and characteristics of waste and waste.(5)

The amount of waste generated every day in Indonesia as a whole reaches 175,000 tons per day or 0.7 kg per person. Accordingly, environmental and health problems due to waste are also increasing. Among other things, from aesthetic problems, blocked water flow which can cause flooding, fire hazard, environmental pollution, to the increase in vector-borne diseases. The quality of river water in Indonesia is generally in the status of heavily polluted. In 2018, 25.1% of villages experienced water pollution, and around 2.7% of villages had their soil polluted. Garbage also contributes to flood events which continue to increase from year to year, in 2016 and 2017 as many as 1,805 floods occurred in Indonesia and caused 433 fatalities.

Garbage generation and waste disposal have a negative impact on the environment and health, therefore it is necessary to take steps to deal with it. Handling of waste and waste is in line with the target of the Sustainable Development Goals (SDGs) goal 12.5 concerning Responsible Consumption and Production which aims to reduce the environmental impact caused to the earth through reasonable production and consumption patterns. One of the concrete targets that serves as a benchmark for the success of the 12th indicator is that by 2030 every country substantially reduces waste production through prevention, reduction, recycling and reuse, in order to ensure sustainable patterns of production and consumption. Regulations in dealing with garbage and waste problems are contained in Law Number 18 of 2008 concerning waste management and its derivatives, and Law Number 32 of 2009 concerning Environmental Protection and Management. In Presidential Decree No. 97 of



2017, the government targets reducing household waste and household-like waste by 30% and handling it by 70% by 2025.(3)

Currently the most commonly found posters are health posters regarding disposing of waste in its place. Garbage is one of the problems faced by many cities around the world, including the City of Bogor. (4) The large population generates a large amount of waste generation as well. Garbage is the most common problem, especially in developing areas and in big cities. If not treated properly, waste can cause serious problems for humans, therefore waste must be treated properly and handled seriously by utilizing the remains of human activities. If people are interested in reading posters or recommendations for disposing of waste in its place, changes in behavior to dispose of waste in its place can also be carried out.(5)

The amount of waste generated every day in Indonesia as a whole reaches 175,000 tons per day or 0.7 kg per person.(12) Therefore, the problem of waste management becomes a very important matter to be resolved. In Indonesia today, efforts are being made to manage waste in the context of tackling pollution, controlling disease, as well as creating clean and comfortable cities. More optimal efforts are needed to increase the results so far, this is not satisfactory. (11) Indonesia has a metro or megacity city which describes a combination of several large cities in one geographical unit with a total population estimated at more than 10 million people, connected by transportation infrastructure, as well as functional urban networks through the flow of goods and services.(13)

Bogor City is one of the megacities in West Java Province, which is located 54 kilometers next to DKI Jakarta Province. (14) As one of the megacities which is a place frequently visited by tourists because of its many tourist destinations, Bogor City has to work hard in dealing with problems rubbish. Garbage in Bogor City comes from various sources, including from settlements, industry, offices, roads and parks, as well as from markets. All waste from each source will lead to the Galuga final waste processing site (TPA), Cibungbulang District, Bogor Regency. Garbage piles in Bogor City always increase every year, while the waste problem itself is still not completely resolved.(15)

The population of Bogor City was more than 1 million people in 2013 with 1,756 m³/day of waste generation, while in 2016 the amount of waste generated by Bogor City was around 530 tons of waste/day. (14) Bogor City's waste management activities in general include (1) Garbage collection from the source, (2) waste transportation to the final waste processing and processing site (TPPAS) in Bogor district, (3) waste handling is carried out by the Cleaning Sector of the Bogor City Sanitation and Landscaping Office, namely market waste, parks, terminals, sweeping protocol roads and collector roads, as well as office centers which are collected and transported to the waste processing and processing area (TPPAS). Waste problems can affect various aspects of life which can worsen the situation in the future if not managed properly.(16)

The purpose of this study was to determine the relationship between attitudes and community behavior in waste management at the Mekarwangi Health Center, Bogor City, in 2022.

RESEARCH METHODS

The research design is a correlational analytic research because it analyzes the dynamics of the correlation between the independent variable (waste management attitude) and the dependent variable (waste management behavior). The design used in this study is quantitative analytic with a cross sectional approach. Cross sectional is a study to study the dynamics of the correlation between risk factors and effects, by way of approach, observation and data collection at once (point time approach). (6) This design is used to determine the relationship between attitudes and people's behavior in management waste at the Mekarwangi Community Health Center, Bogor City, in 2022.

This research was conducted at the Mekarwangi Community Health Center, Bogor City in 2022 on August 23 - August 25, 2022. The population in this study was the community of RW 03 with a total of 573 families and for a sample of 273 families. In taking the sample for this study, the accidental sampling method or technique was used, namely a sampling technique based on chance, that is, anyone who happens to meet the researcher can be used as a sample, if it is deemed that the person who happened to be met is suitable as a data source. (7) Research variable it consists of the attitude of waste management as the independent (free) variable and the behavior of waste management as the dependent (dependent) variable. Data processing and data analysis used the computer program SPSS for windows series 17. The analysis consisted of univariate analysis and bivariate analysis,

RESEARCH RESULT

Table 1: Frequency Distribution of Waste Management Attitudes in the Mekarwangi Community Health Center, Bogor City, in 2022

No	Attitude	Frequency (F)	Percentage (%)
1	Negative	126	48.5%
2	Positive	134	51.5%
	Total	260	100%

Based on table 1 shows that the results of the analysis for the attitude variable are mostly people with a positive attitude, namely 134 people (51.5%).

Table 2: Frequency Distribution of Waste Management Behavior in the Mekarwangi Community Health Center, Bogor City, in 2022

No	Behavior	Frequency (F)	Percentage (%)
1	Positive	135	51.9%
2	Negative	125	48.1%
	Total	260	100.0

Based on table 2, it shows that the results of the analysis for the behavior variable of waste management are mostly people with positive behavior, namely 135 people (51.9%).

Table 3: The Relationship between Attitudes and Community Behavior in Waste Management at the Mekarwangi Health Center, Bogor City, in 2022

Attitude	Behavior				Total		<i>ρ value</i>
	Positive		Negative		F	%	
	F	%	F	%			
Negative	69	54.8%	57	45.2%	126	100%	0.445
Positive	66	49.3%	68	50.7%	134	100%	
Total	135	51.9%	125	48.1%	260	100%	

Based on table 3 regarding the statistical test results for the relationship between attitude and community behavior in waste management at the Mekarwangi 2022 Community Health Center, out of 260 respondents who had a negative attitude, the highest proportion had positive behavior, namely 69 people (54.8%). The statistical test results obtained ρ value = 0.445, which means $\alpha (> 0.05)$ so that there is no relationship between attitudes and community behavior in waste management at the Mekarwangi Health Center, Bogor City in 2022.

DISCUSSION

a. Attitude

The results of univariate analysis of attitudes towards waste management in the Mekarwangi Community Health Center in 2022 from 260 respondents showed that 134 respondents (51.5%) had a positive attitude.

The results of this study are comparable to research conducted by Novita Sari, 2017 examining "Knowledge, Attitudes and Education with Waste Management Behavior in Bener Village, Tegalorejo District, Yogyakarta" with the results of 81 respondents who had a positive attitude of 41 people (50.6%).

Attitude is an assessment process carried out by an individual towards an object. Attitude is a reaction or response that is still closed from someone to a stimulus or object. Attitude is a syndrome or a collection of symptoms in response to a stimulus or object. So that attitude involves thoughts, feelings, attention and other psychological symptoms.(8)

Factors that influence the formation of this attitude are contained in other factors namely: (8) Personal experience, Culture, Other people are considered important, Mass media, Institutions/educational institutions and religious institutions, Emotional factors in the individual, Gender, and Knowledge.



From the research results, it can be concluded between theory and research results that what influences the formation of waste management attitudes in the Mekarwangi Health Center community in 2022 is a positive attitude, namely from the personal experiences of respondents who influence the appreciation of social stimuli related to waste management, culture or habits of respondents in managing waste, respondents consider other people as role models in behavior, there is information from the mass media that can influence respondents such as an appeal to dispose of trash in its place and matters related to waste, understanding gained from educational institutions and religious institutions regarding a clean environment, emotions while that can affect respondents in behaving, hormonal differences in the aspect of gender which can affect the sensitivity of respondents, as well as good knowledge in waste management.

b. Behavior

The results of the analysis for the waste management behavior variable in the Mekarwangi Health Center community from 260 respondents indicated that 135 respondents (51.9%) had positive behavior.

The results of this study are comparable to research conducted by Novita Sari, 2017 research about "Knowledge, Attitudes and Education with Waste Management Behavior in Bener Village, Tegalrejo District, Yogyakarta" with the results of 81 respondents who had positive behavior as many as 55 people (67.9%).

Behavior is something that is done by the organism, whether it can be observed directly or indirectly. This means that new behavior occurs when there is something needed to cause a reaction, which is called stimulation. Thus, a certain stimulus will produce a certain reaction or behavior. (8)

Psychological factors are internal factors that have a very large influence on the occurrence of behavior. These psychological factors are as follows:⁽⁸⁾ Attitudes, Emotions, Beliefs, Habits, Will, Knowledge.

From the research results, it can be concluded between theory and research results that what influences the formation of waste management behavior in the Mekarwangi Health Center community in 2022 is positive behavior, namely from the attitudes taken by respondents, emotions that make respondents aware of the behavior they are carrying out can have an impact, respondents' beliefs that good waste management will have a good impact on himself, good habits of respondents in managing waste, willingness or desire of respondents to achieve a good environment by doing good waste management, education received by respondents both formal and non-formal, then realized through positive behavior.

c. The Relationship between Attitudes and Community Behavior in Waste Management at the Mekarwangi Health Center, Bogor City, in 2022

Based on table 3 regarding the statistical test results for the relationship between attitude and community behavior in waste management at the Mekarwangi Community Health Center in 2022, out of 260 respondents who had a negative attitude, the highest proportion had positive behavior, namely 69 people (54.8%). The statistical test results obtained p value = 0.445, which means α (> 0.05) so that there is no relationship between attitudes and community behavior in waste management at the Mekarwangi Health Center, Bogor City in 2022.

Results This research is comparable to research conducted by Novita Sari, 2017 research about "Knowledge, Attitudes and Education with Waste Management Behavior in Bener Village, Tegalrejo District, Yogyakarta" with the results of 81 respondents who had positive attitudes and behavior as many as 27 people (33.4%).

Attitude is an assessment process carried out by an individual towards an object. Attitude is a reaction or response that is still closed from someone to a stimulus or object. Attitude is a syndrome or a collection of symptoms in response to a stimulus or object. So that attitude involves thoughts, feelings, attention and other psychological symptoms. (8)

Factors that influence the formation of this attitude are contained in other factors namely: (8) Personal experience, Culture, Other people are considered important, Mass media, Institutions/educational institutions and religious institutions, Emotional factors in the individual, Gender, and Knowledge.

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Psychological factors are internal factors that have a very large influence on the occurrence of behavior. These psychological factors are as follows: (8) Attitude, Emotion, Belief, Habit, Will, Knowledge.

From the research results it can be concluded between theory and research results that attitudes and community behavior in waste management at the Mekarwangi Health Center in 2022, namely the results obtained p value = 0.445 greater than α (> 0.05) which means H_0 is accepted or there is no relationship between variables independent with the dependent variable.

CONCLUSION

1. It is known that the frequency distribution of waste management attitudes is dominated by the community with a positive attitude of 134 people (51.5%).
2. It is known that the frequency distribution of waste management behavior is dominated by the community with positive behavior of 135 people (51.9%).



3. There is no relationship between attitudes and community behavior in waste management at the Mekarwangi Health Center, Bogor City in 2022, out of 260 respondents, 69 people (54.8%) had negative attitudes and positive attitudes. The statistical test results obtained p value = 0.445, which means p value (> 0.05).

So the alternative hypothesis is rejected and the null hypothesis is accepted. So that there is no relationship between attitude and community behavior in waste management at the Mekarwangi Health Center in Bogor City in 2022.

SUGGESTION

1. For the Wijaya Husada Bogor STIKes Institution

It is hoped that it will be useful for the institution as a library material for further research, as a source of information about waste management, and as a development of student material as well as being used as a scientific reference on environmental health.

2. For the Mekarwangi Health Center

To further promote better waste management behavior, cooperate with the city cleaning service to provide waste disposal facilities that meet the requirements, play an active role in implementing the cleanliness program.

3. For Further Researchers

Further research is needed to examine other factors related to people's behavior in disposing of garbage.

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